THE

RESULT

OF A

Particular VIEW

OF THE

North Level *of the* FENS.

Taken in AUGUST, 1745.

Noſtri ſunt Amnes, noſtri Lacus, — nos Flumina arcemus, dirigimus, avertimus,———

Cicero de Natur. Deor. Lib. 2. Cap. 60.

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MDCCXLVIII.

THE RESULT

OF A

Particular View

OF THE

Northern Mutinies.

TO

HIS GRACE

JOHN

Duke of *Bedford*, &c.

(At whoſe Deſire this VIEW was taken)

This RESULT is moſt humbly offered,

By

His GRACE's

Moſt devoted,

Moſt obliged, and

Moſt humble Servant,

CHARLES LABELYE.

TO

HIS GRACE

JOHN

Duke of Bedford &c.

May it pleaſe your GRACE,

I HAVE, at your Grace's Deſire, taken a very full and particular View of the *North Level of the Fens*, and of its Outfal to Sea through *Shire Drain* and *Gunthorp Sluices:* I have alſo carefully examined the natural Declivity of the Lands, and the preſent State and Condition of the ſeveral Rivers, Cuts, or Drains, which take their Courſe through the ſaid Level, and made all the neceſſary Obſervations, in order to determine the real Fall of the Waters, eſpecially from *Clow*'s *Croſs* to the *Low-water Mark*, in the preſent Channel,

Channel, over againſt the *Waſh-Way* in *Holland*.

The Reſult of which, and the Methods which appear to me, after ſerious Conſideration, the moſt adviſable to follow at preſent, as the moſt likely to afford a conſiderable Relief to that Part of the *Fens*, and to improve its Outfal, at a very moderate Expence, are contained in the following Articles.

1. I found the *North Level of the Fens*, in general, in a much better State and Condition, than much the greateſt Part of either the *Middle* or *South Level* of the *Fens*.

2. I obſerv'd the Nature of the Soil in the *North Level*, to be generally much of the ſame Nature and Quality as in a great Part of the *Middle Level*, but rather better than in a great Part of the *South Level*.

3. I found the natural Declivity of the Lands in the *North Level*, to be very inconſiderable, though ſomewhat greater from *Peter-*

Peterborough, than in moſt Parts of the two other Levels.

4. I obſerv'd that Declivity to be in general from the *South-Weſt* to the *North-Eaſt*; that is to ſay, for the moſt Part from *Peterborough* towards *Clow's Croſs*.

5. I found all the Cuts and Drains in the *North Level*, to be in a much better State and Condition than moſt of thoſe in the two other Levels; but far from being kept ſo deep, and ſo clean from Mud, Reeds and other Weeds, as they ought to be; in order to afford ſo quick and ſufficient a Diſcharge to the Downfal Waters, as they might.

6. I obſerv'd the Banks of thoſe Cuts and Drains to be in a much better State than moſt of thoſe in the two other Levels. The *North Bank* of *Morton's Leam*, the *Banks* of *Shire Drain*, and the *Bank* next to *Welland Waſhes*, appeared to me the beſt; and yet thoſe Banks, in many Places, are in want of Repairs; but the reſt of the Banks along the Inland Cuts and Drains,

are

are far from being ſo high and ſo broad as they ought to be.

7. I found ſeveral of thoſe Cuts and Drains much narrower, more crooked, and with more ſharp Angles, and ſhort Turnings, than they might, and ought to be; and I found them parted from one another by ſeveral (not only uſeleſs, but very) prejudicial Dams, of which I ſhall take further Notice hereafter.

8. I obſerv'd the natural Fall of the Waters, or the Difference of Levels, in all the Cuts which convey the Waters to *Clow*'s *Croſs*, and from thence to the Sea, thro' *Shire Drain* and *Gunthorp*'s *Sluices*, to be hardly ſenſible; and at the Time of my taking this View, there was hardly any Current towards the Outfal.

9. I found the Outfal to the Sea, between *Gunthorp*'s *Sluice* and the *Waſh-Way*, greatly obſtructed with many looſe Sands, frequently ſhifting by the various Actions of the Winds and Tides; which often occaſions the Channels of the Outfals, both of

of *Wiſbeach* and *Gunthorp*'s, to ſhift their Situations, they being ſometimes very far aſunder, as in the Time of my View, and at other Times they coming nearer together, and even uniting in one; all which Alterations greatly increaſe the Difficulty of keeping good Outfals.

10. I obſerv'd by a Method, much leſs liable to Errors than any Spirit Level, or any other Inſtrument, that the Fall, or Difference of Levels, between Low-Water Mark, over-againſt *Gunthorp*'s *Sluices*, and the Low-Water Mark about four Miles lower to it, over-againſt the *Waſh-Way*, was very conſiderable, and near as much as it is in the Mouths of much better Rivers, it being certainly not leſs than four Feet eight Inches, which is a Fall of fourteen Inches *per* Mile.

11. But I found the Threſhold of *Gunthorp*'s *Sluices* ſo low, that it is certainly not above five Inches higher than the Low-Water Mark at the *Waſh-Way*.

12. Moreover I obſerv'd, at the Time of my View, another Obſtacle to the procur-

ing and preſerving a good Outfal to *Gunthorp*'s *Sluices*; which is, that the Sea has raiſed the Lands, or has thrown a Kind of Bar about a Mile below *Gunthorp*'s *Sluices*; ſo that from that Place to the End of the laſt new Cut, made for the letting of the Scours from *Gunthorp*'s, there is a Fall, or Difference of Level *the wrong Way*, of about twelve or fifteen Inches.

13. I found the lower *Reſervoir* far from being ſo large and capacious as it might be made without endangering its Banks, and a great Quantity of Sand and Silt left in the Way of the Waters, which might and ought to be removed next to the Banks, either on the Inſide or the Outſide of them.

14. I obſerv'd, that at the Time of my View, there was but two Foot Water on the Threſhold of *Clow*'s *Croſs Gates*, at which Time the Surface of the Waters in *Peakirk Drain*, and the *New South Eau*, was not more than about two Foot lower than the Surface of the loweſt Lands in the *North Level*; and I was inform'd, that when theſe Rivers are two Feet and a half higher,

higher, the loweſt Lands begin to be wet by the *Soke* and *downfal Waters.*

15. Laſtly, I examin'd the two Mills erected at the upper End of the ſecond *Reſervoir*, which I found properly ſituated, and of good Workmanſhip, and certainly they muſt prove of great Service in Caſes of Neceſſity; but the Uſe of Mills being attended with a conſtant Expence, they ought not to be uſed, but when all other Means fail.

From all theſe, and many other Obſervations, I am clearly of Opinion, that the chief Cauſe of the bad Condition of the *North Level of the Fens*, after wet Seaſons, is owing principally to the Want of a ſufficient Outfal for the downfal Waters, there being no Rivers that paſs thro' this Level, but what carries the downfal Waters coming down from the Uplands, which makes the Caſe of the *North Level* a very particular one; and, in that at leaſt, very different from the reſt of the *Fens.*

It alſo plainly appears to me, that the ſeveral Cuts and Drains, paſſing thro' the

North Level, are not ſufficient (in the Condition they are in at preſent) to carry off the Waters which they might, and ſhould carry off, after wet Seaſons.

I ſhall now proceed in offering what appears to me abſolutely neceſſary to be done, with all convenient Speed, to put the ſeveral Cuts and Drains, in the *North Level*, in a Condition to reap from them all the good Effects that can be expected. And for greater Perſpicuity, I ſhall ſpeak of every one in particular. And, laſtly, I ſhall annex what I think may, with a moderate Expence, greatly contribute towards maintaining, or even improving the Outfal of *Shire Drain*, as much as the Situation, Nature, and Circumſtances of the Place can afford any reaſonable Hopes.

The *Old South Eau* takes its Origin at *Croyland*, and after a very winding Courſe, did formerly go by *Clow*'s *Croſs* into *Morton*'s *Leam*; but it is now almoſt intirely neglected and grown up, and the Waters it is ſtill able to convey, are turned into the *New South Eau*, by *Fall*'s *Drain* and *Gold Dyke*,

Dyke, being hindered from proceeding farther in their old Courſe by a Dam between *Gold Dyke* and *Clow*'s *Croſs*, where there is another Dam to hinder the Waters from going towards *Morton*'s *Leam*. As to this Dam, I have no Objections againſt it, being of Opinion, that all the Waters which paſs thro' the *North Level* ſhould at laſt be convey'd in one ſingle Body to the Sea; but I think that the whole Length of the *Old South Eau* ought to be cleared, and the Dam between *Gold Dyke* and *Clow*'s *Croſs* ſhould be taken up, in order to give a better Eſcape to the Waters coming down the *Old South Eau*, than by diverting them with ſhort Turnings into the *New South Eau*, which, no Doubt, has more than enough of Waters to carry off, after rainy Seaſons.—I have Reaſons to think, that the *Old South Eau* was formerly a Brook, which was a natural Drain, and might have been improved, and many of its ſhort Turnings and Windings mended, by a few ſhort Cuts here and there, where moſt wanting, without being at the monſtrous Expence of cutting an intire new one juſt by it.

The *New South Eau* takes alſo its Origin at *Croyland*, very near the Beginning of the *Old South Eau:* It is an artificial Cut, made upon a Pretence that the *Old South Eau* was not ſufficient, and too winding; but this might have eaſily been mended, without putting the *Corporation* to the Charge of making this new one.

It makes but one conſiderable Angle, juſt before it enters *Thorney*'s *Lordſhip*, where it receives Part of the Waters collected by the *Catchwater*; from thence it proceeds in a direct Line to *Clow*'s *Croſs*, after receiving, at the other End of *Thorney*'s *Lordſhip*, the Waters ſtill carried by the *Old South Eau*, thro' part of the *Gold Dyke*. I meaſured the *New South Eau* near *Clow*'s *Croſs*, where it is wideſt, and found it twenty-five Feet broad, and three Feet, three Inches Depth of Water at that Time, but very foul, there being near two Feet Mud at Bottom, which ſhould be diked or roaded out, whenever it is a Foot deep. This Cut I alſo found full of Reeds, which ought to be

be cut twice a Year, once juſt before they run to Seed.

My Opinion of this Cut is, that it ought to be clean'd from Time to Time, and its Banks ſhould be raiſed and mended where neceſſary, in order to enable it to carry off a greater Quantity of Water to *Clow*'s *Croſs*.

The next Cut or Drain which carries the downfal Waters to *Clow*'s *Croſs* is *Peakirk Drain*; which, by its low Situation, is certainly the beſt Drain in this Diviſion of the *Fens:* It is a Cut of great Antiquity, at leaſt it was dug long before the *Adventurers* were incorporated. The higheſt Part of it I obſerved at the *Folly Bank*, where it is damm'd from receiving any of the Waters, except thro' a very ſmall Funnel under *Cordyke*. But, in my Opinion, *Peakirk Drain* ſhould have a free Communication with *Cordyke*, as well as with *Catchwater*; and therefore I would adviſe all theſe croſs Dams, on the *Peakirk Drain*, to be taken away. This Drain makes but two conſiderable Angles, in its whole Progreſs to *Clow*'s *Croſs*, where it arrives after having received

received the Waters of *Thorney Dyke*, thro' Part of the *Gold Dyke*. I meaſured *Peakirk Drain*, near *Clow*'s *Croſs*, and found it twenty-three Feet broad, and of the ſame Depth of Water, and in the ſame bad Condition as to its Banks, or Foulneſs, as the *New South Eau*, and therefore in Want of the ſame Remedies, and ſo much the rather, as it is the beſt Drain of the *North Level*.

Thorney Dyke is another Cut or Drain which carries the downfal Waters to *Clow*'s *Croſs*; it takes its Origin near to the Village of *Eye*, and after ſeveral Windings, it receives Part of the Waters from *Cordyke* and *Catchwater Drains*; then from *Thorney Croſs* it proceeds almoſt in a ſtreight Line to *Knarr Croſs*, traverſing in its Way another croſs Cut called *Thorney River*. At *Knarr Croſs* it falls into *Gold Dyke*, making with it almoſt a Right Angle, which ought to be changed into a more gentle Bend, or Elbow. From thence *Thorney Dyke*'s Waters are convey'd by *Gold Dyke* into *Peakirk Drain*, and from thence to *Clow*'s *Croſs*. This Drain wants alſo to be cleaned

cleaned and widened, eſpecially the upper End of it; the Ruſhes, with which I found it almoſt choaked in many Places, ſhould be cut at leaſt twice a Year, and the Mud taken out, as often as it increaſes, ſo as to be one Foot deep at the lower End. And, laſtly, its Banks ſhould be raiſed and mended wherever neceſſary.

Having now mentioned what ſhould be done in reſpect to the Cuts and Drains, which convey the Waters from the *North Level* to *Clow's Croſs*, and from thence to the Sea, thro' *Shire Drain*, I proceed next to mention in what Condition I found the principal croſs Drains, and what appears to me abſolutely neceſſary to be done, for making them anſwer the Purpoſes they were intended for.

The firſt of theſe croſs Drains is *Cordyke*; it receives the downfal Waters of great Part of *Northamptonſhire*, and being pretty high in the Middle, did formerly diſcharge Part of its Waters into the *Welland*, as it is ſtill ſuffered to do, and the Remainder into *Morton's Leam*, from which it is now

cut off by the *North Bank*; and that Part of the Waters collected by *Cordyke* falls now into *Catchwater*, and from thence into *Thorney Dyke*, which is much better.

The other Part of *Cordyke*, inſtead of being turned into the *Welland*, as it has been by the *Folly Banks*, and other uſeleſs Works, ſhould have been continued going into *Peakirk Drain*, which ought to be clean'd and enlarg'd, if neceſſary, eſpecially the upper End of it. However, this Drain of *Cordyke* may be ſtill ſuffered to diſcharge itſelf as it does at preſent, till after the Cuts and Drains have been cleaned, and enlarged where neceſſary, and it be experienced what Effect this will have, as to the Land Waters being then carried to Sea with ſufficient Diſpatch.

What the *Cordyke* wants moſt, at preſent, is to be cleaned from the many Trees, Buſhes, and other Obſtructions, with which it is almoſt every where hindered from anſwering the Purpoſe it was intended for, and its Banks, eſpecially that next to *Thorney*, ſhould be repaired wherever neceſſary,

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and raiſed to a ſufficient Height and Thickneſs to withſtand the greateſt Floods known.

The next conſiderable croſs Drain in the *North Level*, is called the *Catchwater*, which receives a conſiderable Part of the downfal Waters, from the Lands which are ſituated between *Cordyke*, *Welland Waſh*, and *Morton*'s *Leam*, Part of which it diſcharges into the *New South Eau*, after having received the Waters of another pretty conſiderable Drain, called he *Twelve Foot Dyke*; the remaining Part of the Water receiv'd into *Catchwater* from *Cordyke* and the Uplands, are diſcharged into *Thorney Dyke*.

Catchwater Drain wants cleaning and enlarging, and the more ſo, as it is very crooked and winding, which might eaſily be mended in many Places; its Banks, eſpecially that next to *Thorney*, ſhould alſo be raiſed and ſtrengthened wherever neceſſary, and the Dams, which hinder its free Communication with *Peakirk Drain*, ſhould be taken up.

The next conſiderable croſs Drain is *Thorney River*; which, though it is chiefly intended for the Uſe of Navigation, and the Conveniency of the Inhabitants of the *North Level*, by its Communication with the *New Cut* or *Morton*'s *Leam* thro' the *Lock*, or *Pen Sluice*, called the *Dog in a Doublet*; yet it is certainly of Uſe alſo, in conveying ſome of the Waters from the Land. I found this Drain in the beſt Condition of any, and tolerably clean and deep; but I was inform'd, that in wet Seaſons its Banks are often overtopp'd by the downfal Waters, which plainly ſhew, that thoſe Banks ought to be raiſed and ſtrengthened to a ſufficient Height, to carry the Waters which this Drain might carry.

The next croſs Drain which I ſhall take Notice of, is called the *New Cut*, which ſerves for the Navigation from the *New South Eau* into *Peakirk Drain*. This Cut is alſo of ſome Service to draining, and wants the ſame Care and Proviſion as the reſt.

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The laſt croſs Drain which I think worth mentioning, is *Gold Dyke*, of which I have ſpoken before.

This Cut, as almoſt all the reſt, wants cleaning from Reeds and Mud, and its Banks to be raiſed and mended, ſo as to keep all the Waters it receives, and convey them freely in the *New South Eau*, and into *Peakirk Drain*, in order to which all Dams, made a-croſs it, ought to be removed.

Having now gone thro' my Obſervations on the ſeveral Cuts and Drains which convey the downfal Waters of the *North Level* towards the Sea, and mentioned what ſhould be done with all convenient Speed, to render them as effectual towards draining as poſſible, I ſhall conclude this Part with a general Obſervation.

As all Low Lands in the World are more or leſs affected by Rain, or other Waters after wet Seaſons, and that the *Fens* in general lay very low, and are of ſuch Nature, as to be moſt and ſooneſt affected by

by Water; it can never be expected, that they ſhould be always perfectly dry. And I am not certain, whether it is not better, after all, that they ſhould be flooded at ſome Time of the Year, in which I am confirmed by the Practice and Experience of what is done in *Holland*, *Flanders*, and the adjacent Provinces, where the Inhabitants are ſo far from thinking that the Land-Waters lying for ſome Time over their Lands, are of any Prejudice to them, that they keep them flooded the greateſt Part of the Winter. However, I have pointed out what appears to me the moſt natural and effectual Means to obtain a conſiderable Relief, by Means of theſe Cuts and Drains; I conceive that the Sums which are ſet apart to be laid out annually on this Part of the *Fens*, (if properly applied, and by Perſons both capable and willing to do their Duty) are ſufficient for the Purpoſe. But if thoſe Means, pointed out by Nature and common Senſe, are neglected, I think it is in vain to expect that Providence ſhould hinder the natural Courſe of the Waters, and work daily or yearly Miracles in favour of

People,

People, who will not make Uſe of the Means they have to help themſelves.

I ſhall now conſider the Outfal of *Shire Drain*, and mention what I think may preſerve, and even improve it.

Whoever has been upon the Spot, and is capable of making any Obſervation, muſt be ſenſible, that the Nature, Situation, and other Circumſtances of the Land and Sea-Shore, are ſuch as will always make it difficult to procure and maintain a good Outfal for the *North Level.* For the Bay between *Lincolnſhire* and *Norfolk*, (called by the *Romans*, *Metauris Æſtuarium)* is a wide extended Bay, full of Shoals and ſhifting Sands, greatly expoſed to many boiſterous Winds, from the North to the Eaſt-South-Eaſt, which joining to the Action of the Tides, muſt occaſion great Alterations in the Outlets of all Rivers and Streams, which empty themſelves in this Bay; and the more, if it be conſidered, that all thoſe Outlets have very ſcanty Back-waters, very ſmall Indraughts for the Tide-waters, and that the Sands, which are carried

ried to and fro, all over the Bay, are extremely looſe, and yielding to the leaſt Impulſe.

Now the Cut call'd *Shire Drain*, is certainly made ſo broad and capacious, that it would carry to Sea-wards much greater Quantities of Water than it generally does; but it happens, that there is no River, or conſtant Stream, that paſſes thro' this *Level*; nay, ſome People have been ſo wrong-headed formerly, that rather than to raiſe or mend the Banks of the Cuts or Drains, they have turned Part of the Waters which came into *Cordyke* from the Uplands, into the *Welland*; ſo that all the Means left to improve or maintain the Outfal of *Shire Drain*, are, in my Opinion, to make uſe of the Tides and Land-waters, to the beſt Advantage, and to ſecure the Mouth of the Outfal, as much as poſſible, from ſilting, by bringing it cloſe under the *Lincolnſhire Shore*, and carrying it as far to Sea as it will be found practicable.

To effect this, it is my humble Opinion, that the *Reſervoir*, or lower Receptacle next

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to *Gunthorp*'s *Sluices*, ſhould be cleaned from all the Silt and Sand, which I found left in it in the Way of the Waters, inſtead of being removed next to its Banks.—That this *Reſervoir* ſhould be deepen'd, and enlarg'd as much as poſſible, ſince in dry Seaſons, there is nothing elſe to hinder the Mouth of the Outfal of *Shire Drain* from choaking up by the Action of the Winds and Tides on the looſe Sands.

I obſerv'd, in my View, a Piece of Ground next to that *Reſervoir*, in which the high Tides flow in Part; which Ground, by mending the Bank which parts it from the Sea, and digging it out to the ſame Depth, or thereabouts, as the *Reſervoir* itſelf, would be no inconſiderable Addition of Waters for every Scour. I am ſenſible, that this Kind of a *Side-Pond* would be ſooner ſilted up than the *Reſervoir*, but the Expence of cleaning it from Time to Time, will be more than made up by its Uſe. For the ſame Reaſons I am of Opinion, that all conſiderable Tides ſhould be received and pent up in the *Reſervoir*, even the Whole of the higheſt Spring Tides, which ſome call the *Raging Tides*; ſince

nothing is more evident, than that the more Water there is, and the higher the Head of the Scour is, the more forcibly will it act: And from what I obſerved, I think, that in order to let in and out ſuch high Tides conveniently, the *Windlaſſes* of the four *Draw-Doors* at *Gunthorp*'s, the *Cap-Tree* of the *Poſts* in which they play, and the *Floor* on which the Men ſtand to draw them up or down, ſhould be raiſed about two Feet. I am alſo ſenſible, that thoſe *raging* and *extraordinary Tides* are the fouleſt, and bring the greateſt Quantity of Sand and Silt into the *Reſervoir*; but that ſhould be no Objection againſt receiving them, ſince they will ſcour the Outfal with the greateſt Force when let out: For, in ſhort, the Land Owners of the *North Level* have it in their Option, either to be at the Expence of cleaning the *Reſervoir* oftner than at preſent, and have a good Chance to maintain an Outfal, or ſave that Expence by keeping the high Tides and Part of the Silt out, and have no Chance for keeping an Outfal, or elſe being obliged to make new ones from Time to Time, by Dint of Labour, and Expence.

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What has been mentioned is ſufficient to ſhew how to make Uſe of the Tides to the beſt Advantage; as to the Land-waters, I have already explained, at large, what I think ſhould be done to the ſeveral Cuts and Drains in the *North Level*, which muſt certainly not only relieve the *Fens* in wet Seaſons, but greatly add to the Scours of *Gunthorp*'s *Sluices*. To which I now add, that whenever there be a Neceſſity of working the Mills, at the lower End of *Shire Drain*, the Waters in the *Upper Reſervoir* ſhould always be let off in the *Lower one*, as ſoon as poſſible.

As to the preſerving the Outfal, by bringing it cloſe under the *Lincolnſhire Shore*, and further to Sea-ward, than it is now; I conceive, that in order to do this, ſome Means muſt be found to raiſe the Sands on the Eaſt Side of the preſent Outfal; to effect which, nothing plainer or cheaper occurs to me than to make *Incloſures* of *Stakes* and *Hurdles*, ſituated as I have deſcribed, in the *Eye Draught annex'd* in *Red Dots*. The Manner of placing thoſe *Stakes* and *Hurdles* is alſo deſcribed by three

Sketches at the Reverſe of the *Eye Draught*, which ſhew all the poſſible Caſes of uſing them, better than any Deſcription by Words could do. I am of Opinion, that this will prove as effectual as *Jetties* or *Drifts of Piles*, or any other more coſtly Works; and, I think, that the *Cheapneſs* and *Plainneſs* of this Method ſhould rather recommend it. I have ſeen in *Switzerland* and in *France*, *Hurdles* employ'd in a Manner ſomething like this, very ſucceſsfully, not only in preſerving *Lands* from being torn away by Torrents, and rapid Rivers, but in increaſing *Iſlands*, and gaining *firm Lands* out of *Lakes* and *broad Rivers*. And, therefore, I ſhall add a few Words more as to the Conſtruction and Uſe of theſe *Incloſures*.

The *Stakes* and *Hurdles* may be made of any Wood, even *Oziers*, *Willow*, or *Alder*, no Mattet whether green or dry. The *Hurdles* ſhould not be leſs than ſix Feet, or longer than ten Feet, and eight Feet ſeems to me a good Length; the Breadth of the *Hurdles*, or rather the Height, in the Manner in which they are to be uſed in this Place, ſhould not be leſs than

than two, or more than three Feet; and two Feet, ſix Inches appears to me the moſt convenient Breadth in this Caſe.

The *Stakes* ſhould be about three or four Inches thick; no Matter whether *ſquare* or *round*, *barked* or *not*. As to their Length, that muſt be determined by Experiments, ſince they ſhould be driven with a *two-handled Beetle*, two Foot deeper than two Men can force one of thoſe *Stakes* in the *Sands*, with only their Hands: So that if it be found, by Experience, that two Men can enter ſuch a *Stake* coarſely pointed at one End, three Feet deep into the Sands, that will ſhew that the Stake ought to be ſix Feet long, and driven five Feet deep into the Ground, and ſtanding but one Foot out of the Ground.

The *Hurdles* ſhould be entered in the Sands about eighteen Inches, in as narrow a Channel as can be made with a *Spade*, and therefore ſtand out above the Ground, or Sand but about one Foot, as well as the Stakes to which they are pinn'd.

Moreover, I think proper to mention, that thoſe *Incloſures* ſhould not be leſs than about

about fifty Feet every Way, or more than one Hundred ſquare, or every Way.

The firſt Raiſing in this Place ſhould not be above one Foot, for fear of giving too much *Hold* to the Action of the Winds and Tides, eſpecially if Storms ſhould ariſe, when the Work is yet *green or newly made.*

But if this Work ſucceeds, a new Set of *Hurdles*, after ſome Time, may be placed behind the firſt Set, pinn'd to the ſame *Stakes*, and ſtanding about eighteen Inches above the firſt Set. And if the Sands are raiſed to this ſecond Height, that is, to two Feet ſix Inches higher than they are now, I conceive it will be ſufficient, and the Surface of it will ſoon acquire a Coat of Graſs, which will greatly preſerve it againſt future Accidents.

It is evident, that if this Method of raiſing the Sands ſucceeds, on the Eaſt Side of the preſent Cut, by making the *Incloſures* as they are mark'd in the *Eye Draught* with *Red Dots*, there are then certain Grounds to go upon, to lengthen the Cut by Mens Hands, thro' the green Marſhes, along

along the *Lincoln Shore*, as is alſo expreſs'd in the *Eye Draught* by *Black Dots*, and to continue it to Sea-ward as far as it will be found practicable, undertaking no more at a Time than what can be dug, and the *Incloſures* made on the Eaſt Side, between the Time of the *Neap-Tides* and the next *Spring-Tides*. This is all that I think neceſſary to ſay on this Subject.

I remain, with the utmoſt Reſpect,

My LORD,

Your GRACE's

Moſt devoted,

Moſt obliged, and

Moſt humble Servant,

Crown-Court, Weſtminſter, *Sept.* 9, 1745.

CHARLES LABELYE.

POSTSCRIPT.

WHEN the Cut from *Gunthorp*'s *Sluices* is brought close along the *Lincolnshire Shore*, and carried further to Sea-ward, it may be improved by turning into it, in as streight a Direction as possible, a pretty considerable Brook or Drain, which empties itself but a little Distance lower than *Gunthorp*'s *Sluices*; and the Tide-Waters left all over that Part of the green Marshes on the Outside of Mr. *Crop*'s Bank, might also be easily made so many *Feeders* to the Cut, or Outfal of *Gunthorp*'s *Sluices*. I owe this Hint to the Sagacity of *Thomas Holt*, Esq; who made me observe it on the very Spot.

FINIS.